

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

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In re application of: Gregg E. SKOW

Group Art Unit: 2167

Serial No.: 10/627,492

Examiner: K. M. Lovel

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For: MULTIPLE SYSTEM COMPATIBLE DATABASE SYSTEM AND METHOD

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Docket No.: H0003921

Customer No.: 00128

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**APPEAL BRIEF PURSUANT TO 37 C.F.R. § 41.37**

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Sir:

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Appellant hereby submits its Appeal Brief in response to the rejection of the subject patent application.

The Commissioner is hereby authorized to charge Ingrassia, Fisher & Lorenz, Deposit Account No. 50-2091, \$510 for the filing of this Appeal Brief.

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## I. Introduction

This is an Appeal Brief under 37 C.F.R. § 41.37 appealing the rejections set forth in the Office action dated November 11, 2007. Each of the topics required by 37 C.F.R. § 41.37 is presented in this Brief and is labeled appropriately.

## II. Real Party in Interest

Honeywell International, Inc. ("Honeywell") is the real party in interest of the present application. An assignment of all rights in the present application to Honeywell was executed by the inventors and recorded by the U.S. Patent and Trademark Office at

5    **Reel 014342, Frame 0163.**

### III. Related Appeals and Interferences

There are no appeals or interferences related to the present application of which Appellant is aware.

#### IV. Status of Claims

Claims 1-29 and 37-49, which are presented in the Claims Appendix, are pending in the application. Each of Claims 1-29 and 37-49 stand at least twice-rejected, each of Claims 30-36 have been canceled. Accordingly, the Appellant hereby appeals the final  
5 rejection of Claims 1-29 and 37-49.

V. Status of Amendments

No amendments following the final Office action of April 9, 2007 have been filed.

## VI. Summary of Claimed Subject Matter

The subject matter of independent Claim 1 relates to a program product that includes a database (110) and at least one physical computer-readable medium (112).

The database (110) is compatible with multiple end-user systems (102-1, 102-2, 102-3, . .

5 . 102-N) and includes a data section (306) and a structure section (304) (pg. 6, ll. 18-30; pg. 8, ll. 4-9; FIG. 3). The data section (306) includes a plurality of data records (204-1, 204-2, 204-3, . . . 204-N) (pg. 8, ll. 6-9) and the structure section (306) includes at least a feature mask (210) that includes data that indicates whether a particular one of the data records is compatible with one or more of the end-user systems (pg. 7, ll. 21-27; pg. 10,  
10 ll. 29-31; FIGS. 2, 3). The at least one physical computer-readable medium has the database stored thereon.

The subject matter of independent Claim 15 relates to a method of generating a database (110) that is compatible with multiple end-user systems (102-1, 102-2, 102-3, . .

15 . 102-N), and includes generating a data section (306), storing a plurality of data records (204-1, 204-2, 204-3, . . . 204-N) in the data section (pg. 8, ll. 6-9), and generating a feature mask (210) that includes data that indicates whether a particular one of the stored data records is compatible with one or more of the end-user systems (pg. 7, ll. 21-27; pg. 10, ll. 29-31; FIG. 2).

20

The subject matter of independent Claim 37 relates to a computer system (100) that includes a processor (104), memory (112) in operable communication with the processor, and a database (110). The database is stored in the memory (pg. 6, ll. 8-9), is



compatible with multiple end-user systems (102-1, 102-2, 102-3, . . . 102-N) (pg. 6, ll. 18-30), and includes a data section (306) and a structure section (304) (pg. 8, ll. 1-2; FIG. 3). The data section includes a plurality of data records (204-1, 204-2, 204-3, . . . 204-N) (pg. 8, ll. 6-9). The structure section includes a feature mask (210) that includes data that  
5 indicates whether a particular one of the data records is compatible with one or more of the end-user systems (pg. 7, ll. 21-27; pg. 10, ll. 29-31; FIG. 2).

The subject matter of independent Claim 49 relates to a flight management system that includes memory (112), a navigation database (110), and a processor (104).  
10 The navigation database is stored in the memory (pg. 6, ll. 8-9), is compatible with multiple flight management systems (pg. 6, ll. 18-30), and includes a data section (306) and a structure section (304) (pg. 8, ll. 1-2; FIG. 3). The data section includes a plurality of navigational data records (204-1, 204-2, 204-3, . . . 204-N) (pg. 8, ll. 6-9), and the structure section includes a feature mask (210) that includes data that indicates whether a  
15 particular one of the navigational data records is compatible with one or more of the flight management systems (pg. 7, ll. 21-27; pg. 10, ll. 29-31; FIG. 2). The processor is configured to generate an aircraft flight plan based at least in part on the navigational data stored in the navigation database (pg. 1, ll. 13-25; pg. 23, ll. 9-10).

VII. Grounds of Rejection to be Reviewed on Appeal

The grounds of rejection to be reviewed in this appeal are as follows:

1. Whether Claims 1-29 and 37-48 are unpatentable under 35 U.S.C. § 103  
5 over U.S. Patent Nos. 6,804,664 (Hartman et al.), 7,103,605 (Hazi et al.) and 5,794,244  
(Brosch et al.)
2. Whether Claim 49 is unpatentable under 35 U.S.C. § 103 over U.S. Patent  
No. 6,134,500 (Tang et al.), Hartman et al., Hazi et al., and Brosch et al.

10

## VIII. Arguments

I. CLAIMS 1-29 AND 37-48 ARE NOT UNPATENTABLE UNDER 35  
U.S.C. § 103 OVER HARTMAN ET AL., HAZI ET AL., AND BROSCH  
5 ET AL.

A. Hartman et al.

Hartman et al. relates to a database that is structured to enable faster, more  
efficient queries. To do so, the data to be stored in the database is characterized as a  
10 number of questions, and each record in the database comprises bit map groups that  
correspond to the answers to the questions. The answers may be binary attributes, range  
attributes, and string attributes, depending on the question type. With this type of  
structure, database queries are obtained by simple bit-wise Boolean operations of the  
records in the database, beginning first with binary attribute matching, then range  
15 attribute matching, and finally string attribute matching. With each attribute matching  
operation, various of the records in the database are eliminated from the query, thus  
making the query more efficient (col. 8, l. 9 through col. 12, l. 11).

B. Hazi et al.

20 Hazi et al. relates to a system and method for supplying unique views of an  
electronic catalogue to different users. Hazi et al. discloses a system that includes an  
electronic database (100) having a plurality of data records that comprise a master data  
set. The system generates subsets of the data records that each includes one or more data

records selected from the master data set. To do so, the system includes a software program (200) that includes a data record masking module (202) for selectively providing different views for displaying the generated data subsets to a plurality of users. The data record masking module (202) includes a plurality of bit vector indices, and performs  
5 various bitwise AND operations between pairs of the bit vector indices. The general result is that the masking module (202) prevents one user from accessing all of the data records in another data subset by limiting each user to only those records defined by one of these bit vector index (col. 2, l. 62 through col. 3, l. 51).

10 C. Brosch et al.

Brosch et al. relates to a data storage system that includes a plurality of data storage devices and various types of media, and that provides a list of all the data storage device types in data storage libraries. The listed data storage device types are each eligible to perform a requested storage operation. More specifically, the system is  
15 responsive to a user request, which includes media type (MT) and recording type (RT) attributes, to access the data storage library (col. 6, ll. 5-20). Upon receipt of the user request, the system encodes the request for indexing pre-prepared MT and RT tables (col. 6, ll. 22-30).

The RT and MT tables each include a plurality of rows and columns that define a  
20 plurality of entries. Each row in the RT and MT tables correspond to a recording or media technology, respectively, specified in the user request, and each column in both tables corresponds to a specific device that is present in the system (col. 6, l. 32 through col. 8, l. 22).

After the request is encoded, the MT and RT tables are indexed to generate an MT mask and an RT mask. The MT and RT masks are then combined using a Boolean AND operation to generate a request mask that indicates the storage device types are appropriate for the user request (col. 8, ll. 24-67).

5

D. Analysis

The Examiner bears the initial burden of establishing a *prima facie* case of obviousness. In re Fine, 837 F.2d 1071, 1074 (Fed. Cir. 1988). Indeed, the Examiner has the burden of setting forth a detailed evidentiary basis for the teaching, suggestion or  
10 motivation to combine the cited references. Indeed, as the Supreme Court recently reiterated, it is “important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.” KSR International Co. v. Teleflex Inc., 127 S. Ct. 1727, 1741 (2007). A claim cannot be found *prima facie* obvious unless all of the claim elements are either  
15 taught or suggested in the cited art or form part of the knowledge of one of ordinary skill in the art, or all of claim elements are obvious from the nature of the problem itself. In re Dembiczak, 175 F.3d 994, 999 (Fed. Cir. 1999) (emphasis added); In re Wilson, 424 F.2d 1382, 1385 (C.C.P.A. 1970) (“All words in a claim must be considered in judging the patentability of that claim against the prior art.”).

20 Moreover, it is well-settled that, in order to avoid succumbing to the temptation of reliance on hindsight, the teaching or suggestion to make the claimed combination must not be found in an applicant’s disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Although it is recognized that any determination of obviousness is, in a

sense, based on hindsight reasoning, if the determination does not take into account only knowledge within the level of ordinary skill in the art at the time the claimed invention was made, but relies on knowledge gleaned only from an applicant's own disclosure, then hindsight has been impermissibly applied. In re McLaughlin, 443 F.2d 1392, 1395, 170 USPQ 209, 212 (CCPA 1971).

Appellant submits that the Examiner has not met his burden in establishing a *prima facie* case of obviousness because the prior art does not objectively teach or suggest all of the recited claim elements, nor are all of the recited claim elements obvious from the nature of the problem itself. It is submitted that the Examiner is unwittingly relying on impermissible hindsight reasoning, as will now be explained.

Independent Claim 1 relates to a computer-readable medium having a database stored thereon that is compatible with multiple end-user systems and that includes a data section having a plurality of data records, and a structure section having at least a feature mask, and recites, *inter alia*, the feature mask including data that indicates whether a particular one of the data records is compatible with one or more of the end-user systems.

Independent Claim 15 relates to a method of generating a database that is compatible with multiple end-user systems that includes generating a data section, storing a plurality of data records in the data section, and recites, *inter alia*, generating a feature mask that includes data that indicates whether a particular one of the stored data records is compatible with one or more of the end-user systems.

Independent Claim 37 relates to a computer system that includes a processor, memory in operable communication with the processor, and a database stored in the memory that is compatible with multiple end-user systems and that includes a data

section having a plurality of data records, and a structure section having at least a feature mask, and recites, *inter alia*, the feature mask including data that indicates whether a particular one of the data records is compatible with one or more of the end-user systems.

5           1.       The Shortcomings of Hartman et al.

          In the most recent Office action the examiner alleges that Hartman et al. discloses a database that is compatible with multiple end-user systems, and cites col. 4, ll. 51-67 to support this allegation. The examiner further alleges that Hartman et al. discloses a feature mask that includes data that indicates whether a particular one of the data records  
10 is compatible with one or more of the end-user systems, and cites col. 8, ll. 54-60, and col. 9, ll. 44 through col. 10, l. 28 to support this allegation.

          As to the first allegation delineated above, this portion of Hartman et al. has been repeatedly perused, and Appellant can find no teaching of database compatibility with multiple end-user systems. As to the second allegation, it is noted that the recited  
15 portions of Hartman et al. merely describe the methodology that is employed during the above-described binary attribute matching operation to efficiently determine whether a query profile matches a section (or chunk) of a record that is stored in a database. In particular, binary, range, and string attributes of a submitted database query profile are matched against binary, range, and string attributes in the queried database. This clearly  
20 does not disclose, or even remotely suggest, providing a database with a structure section that includes a feature mask having data that indicates whether a particular data record is compatible with one or more end-user systems. Office action at 3-4.

          In view of the foregoing, it is submitted that Hartman et al. fails to disclose or

suggest a database that is compatible with multiple end-user systems. Indeed, all that Hartman et al. teaches is an efficient method of performing database queries by comparing database query attributes with various attributes of the queried database.

Hence, Appellant submits that the capability of determining whether two records match is

5 not even remotely synonymous with providing a feature mask that includes data that indicates whether a particular one of the data records is compatible with one or more of the end-user systems. Appellant further submits that Hartman et al. may, *at best*, teach the provision of various masks that include data that indicates whether a particular data record is compatible with one or more **user requests**, NOT one or more **end-user**  
10 **systems**. Indeed, it is believed to be quite telling that Hartman et al. is completely silent regarding the particular end-user systems from whence a database query is supplied.

Despite the plurality of clear shortcomings of Hartman et al. that were just noted, the examiner believes that the only shortcoming of Hartman et al. is that it does not “explicitly disclose the recited structure section,” *id.* at 4, and relies on Hazi et al. and  
15 Bosch et al. to fill this gap. While not agreeing that this is the only shortcoming of Hartman et al., Appellant nonetheless disagrees that Hazi et al. or Brosch et al., either alone or in combination, fill this lacunae.

## 2. The Shortcomings of Hazi et al.

20 In particular, the Office action cites col. 3, ll. 14-21 and col. 4, ll. 5-12, 47-53 of Hazi et al. as allegedly teaching a structure section that includes a feature mask. *Id.* It is noted that col. 3, ll. 14-21 describes the general structure and function of the above-mentioned data record masking module (“The data record masking module 202



comprises a plurality of bit vector indices. The data record masking module 202 defines the first subset 130 by performing a bitwise AND operation between a first and second bit vector index. The first bit vector index defines all of the data records available in the master data set 202. The second bit vector index defines the data records in the first subset 130 that are presented in the first view 70.”), col. 4, ll. 5-12 states that the masking module defines the availability of data record subsets to derivative processors (“The masking module 202 may define which of the subsets 130-132 of data records are available to each derivative processor 254 for display to each of the groups defined by the respective derivative processor 254.”), and col. 4, ll. 47-53 states that the masking module defines the availability of executable features to each derivative processor (“The feature masking module 208 defines which of the executable features are available to each derivative processor 254 for use by each of the groups defined by the respective derivative processor 254.”). As will now be explained, Appellant submits that, for several reasons, these sections do not disclose, or even remotely suggest, a structure section that is part of a database, let alone a structure section that includes the recited feature mask.

The disclosed data record masking module 200, which implements the alleged feature masking functions, does not even form part of the database. Rather, this module is a separate and distinct software module that merely interfaces with the underlying database. Moreover, the sections of Hazi et al. cited in the Office action merely disclose paradigms for determining whether particular data are available for viewing by particular viewers. These sections include no teaching whatsoever that is directed to, or suggests, a determination of compatibility of database data records with one or more end-user

systems, only with whether data records should be made available for viewing by a user of an end-user system. Most, if not all, of the data records may be, and likely are, compatible with each of the end-user systems (e.g., derivative processors); however, subsets of the data records, while compatible with the end-user systems, are not made available to one or more of the end-user systems. Availability to a system, and compatibility with a system, are completely different issues.

### 3. The Shortcomings of Brosch et al.

The examiner relies on Brosch et al. to fill what she believes is the sole remaining shortcoming of the combination of Hartman et al. and Hazi et al.; namely, that this combination of references fails to teach the recited features of the feature mask. Specifically, although the examiner readily admits, as Appellant points out above, that Hartman et al. and Hazi et al. fail to teach a feature mask that includes data that indicates whether a particular one of the data records is compatible with one or more end-user systems, the examiner alleges that Brosch et al. fills this gap. Again, while not admitting that this is the only shortcoming of the combined teaching of Hartman et al. and Hazi et al., Appellant submits that Brosch et al., fails to fill the alleged gap.

The Office action cites col. 5, ll. 37-40 and col. 6, l. 38 through col. 7, l. 6 of Brosch et al. as allegedly disclosing the claimed feature mask. Office action at 4. However, these sections (and all other portions of Brosch et al. for that matter) merely disclose a methodology for determining which data storage devices in a data storage system are compatible with a data access request by a user. This reference has no teaching or suggestion whatsoever that is related to the technical field of databases, and

hence no teaching or suggestion whatsoever regarding compatibility of data records to end-user systems. Rather, its teachings are directed solely to the determination of compatibility between user data access requests and specific data storage devices.

Compatibility of a user supplied data access request and specific data storage devices,  
5 and compatibility of data records in a database to end-user systems are wholly disparate technological issues.

#### 4. The Combined Teachings of the Cited References Fall Short

From the above discussion, it is believed to be quite clear that the combined  
10 teachings of Hartman et al., Hazi et al., and Brosch et al. fails to disclose at least a structure section that includes at least a feature mask, the feature mask including data that indicates whether a particular one of the data records is compatible with one or more of the end-user systems. Indeed, when analyzed objectively it is submitted that the only way one could conclude that this particular feature is taught by these references is  
15 through reliance on the Applicant's own disclosure.

#### 5. Conclusion

In view of the foregoing, Appellant submits that the combination of Brooker et al. and Hartman et al. fails to establish a *prima facie* case of obviousness of independent  
20 Claims 1, 15, and 37. Moreover, because independent Claims 1, 15, and 27 are not obvious, then dependent Claims 2-14, 16-29, and 38-48 are also not obvious. In re Fine, *supra*.

II. CLAIM 49 IS NOT UNPATENTABLE UNDER 35 U.S.C. § 103 OVER  
TANG ET AL. HARTMAN ET AL., HAZI ET AL., AND BROSCHE ET  
AL.

5

A. Hartman et al., Hazi et al., and Brosch et al.

These references were described above, and the descriptions thereof will not be repeated.

10

B. Tang et al.

Tang et al. relates to a system and method for generating a minimum-cost airline flight plan from a point of origin through a set of fix points to a destination point.

C. Analysis

15

Independent Claim 49, consistent with the other independent claims, recites, *inter alia*, a structure section that includes a feature mask, the feature mask including data that indicates whether a particular one of the navigational data records is compatible with one or more of the flight management systems. As noted above, none of Hartman et al., Hazi et al., or Brosch et al., either alone or in combination, are understood to disclose or

20 suggest at least this feature. Moreover, without conceding that Tang et al. discloses or suggests what the examiner alleges in the final Office action, upon review of this reference, Appellant submits that it also fails to disclose or suggest this feature.

In view of the foregoing, Appellant submits that the combination of Hartman et al., Hazi et al., Brosch et al., and Tang et al. fails to establish a *prima facie* case of obviousness of independent Claim 49.

IX. Conclusion

In view of the foregoing, Appellant submits that the rejections of Claims 1-29 and 37-49 are improper and should not be sustained. Therefore, a reversal of the rejections in the final Office action dated November 27, 2007, is respectfully requested.

5

Respectfully submitted,

10 Dated April 21, 2008

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## X. CLAIMS APPENDIX

### Claims on Appeal

1. A program product, comprising:
  - 5 a) a database that is compatible with multiple end-user systems, the database comprising:
    - a data section that includes a plurality of data records; and
    - a structure section that includes at least a feature mask, the feature mask including data that indicates whether a particular one of the data records is
    - 10 compatible with one or more of the end-user systems;
    - and
    - b) at least one physical computer-readable medium having said database stored thereon.
- 15 2. The program product of Claim 1, wherein:
  - each data record has one or more features associated therewith; and
  - the feature mask data indicates whether each feature of a data record is compatible with one or more of the end-user systems.
- 20 3. The program product of Claim 2, wherein:
  - each data record includes at least a feature field containing one or more feature bits that represent each of the features associated therewith; and
  - the feature mask includes one or more feature mask records, each feature mask record including at least one or more compatibility fields each containing one or more

bits that indicate whether a particular one of the data records is compatible with one or more of the end-user systems.

4. The program product of Claim 1, wherein:

5 the data section comprises a plurality of data tables, each data table including a plurality of the data records; and

the structure section comprises a plurality of features masks, each feature mask at least associated with one of the data tables and including data that indicates whether a particular one of the data records in an associated data table is compatible with one or  
10 more of the end-user systems.

5. The program product of Claim 4, wherein:

each data record in each data table includes at least a feature field containing one or more feature bits that represent each of the features associated therewith; and

15 each feature mask includes a plurality of feature mask records, each feature mask record including at least one or more feature mask values that indicate whether a particular one of the data records in the associated data table is compatible with one or more of the end-user systems.

20 6. The program product of Claim 1, wherein the structure section further comprises a system identification table that includes data that uniquely identifies each of the end-user systems.



7. The program product of Claim 6, wherein the system identification table comprises a plurality of system identification records, each system identification record associated with each of the end-user systems.

5           8. The program product of Claim 1, wherein:  
the data section comprises a plurality of data tables, each data table including a plurality of the data records; and  
the structure section further comprises a table pointer table that includes data that uniquely describes at least each of the data tables.

10

9. The program product of Claim 8, wherein:  
the table pointer table comprises a plurality of table pointer records; and  
at least one table pointer record is associated with each of the data tables.

15           10. The program product of Claim 9, wherein each table pointer record includes data representative of at least:  
a location of the associated data table;  
a number of the data records in the associated table; and  
a size of each data record in the associated data table.

20

11. The program product of Claim 1, wherein:  
each data record includes one or more fields; and

the structure section further comprises a field definition table that includes at least data representative of each of the data record fields.

12. The program product of Claim 11, wherein the structure section further comprises one or more return type tables, each return type table including data representative of a format of each of the data record fields.

13. The program product of Claim 1, further comprising:  
a header section that includes data representative of indicia that is used to identify the database.

14. The program product of Claim 13, wherein the header section further includes data representative of a location of the structure section.

15. A method of generating a database that is compatible with multiple end-user systems, the method comprising the steps of:

generating a data section;  
storing a plurality of data records in the data section; and  
generating a feature mask that includes data that indicates whether a particular one of the stored data records is compatible with one or more of the end-user systems.

16. The method of Claim 15, further comprising:  
associating one or more features with each data record,

wherein, the feature mask data indicates whether each feature of a data record is compatible with one or more of the end-user systems.

17. The method of Claim 16 further comprising:  
5 including at least a feature field in each data record;  
supplying each feature field with one or more feature bits that represent each of the features associated therewith;  
including one or more feature mask records in the feature mask; and  
supplying each feature mask record with one or more feature mask values that  
10 indicate whether a particular one of the data records is compatible with one or more of the end-user systems.

18. The method of Claim 15, further comprising:  
dividing the data section into a plurality of data tables that each include a  
15 plurality of the data records; and  
generating a plurality of features masks that are each at least associated with one of the data tables and that each include data indicative of whether a particular one of the data records in an associated data table is compatible with one or more of the end-user systems.

20

19. The method of Claim 18, further comprising:  
including at least a feature field in each data record in each data table;

supplying each feature field with one or more feature bits that represent each of the features associated therewith; and

including one or more feature mask records in the feature mask; and

supplying each feature mask record with one or more feature mask values that

5 indicate whether a particular one of the data records in the associated data table is compatible with one or more of the end-user systems.

20. The method of Claim 15, further comprising:

generating a system identification table that includes data that uniquely

10 identifies each of the end-user systems.

21. The method of Claim 20, further comprising:

including a plurality of system identification records in the system identification table, each system identification record associated with each of the end-user systems.

15

22. The method of Claim 15, further comprising:

dividing the data section into a plurality of data tables that each include a plurality of the data records; and

generating a table pointer table that includes data that uniquely describes at least

20 each of the data tables.

23. The method of Claim 22 further comprising:

including a plurality of table pointer records in the table pointer table, at least one table pointer record is associated with each of the data tables.

24. The method of Claim 23, further comprising:  
5 supplying each table pointer record with data representative of at least (i) a location of the associated data table, (ii) a number of the data records in the associated table and (iii) a size of each data record in the associated data table.

25. The method of Claim 15, further comprising:  
10 including one or more fields in each data record; and  
generating a field definition table that includes at least data representative of each of the data record fields.

26. The method of Claim 25, further comprising:  
15 generating one or more return type tables, each return type table including data representative of a format of each of the data record fields.

27. The method of Claim 15, further comprising:  
generating a structure section and including the feature mask therein;  
20 generating a header section; and  
supplying the header section with data representative of indicia that is used to identify the database.

28. The method of Claim 27, wherein the header section further includes data representative of a location of the structure section.

29. The method of Claim 15, further comprising:  
5 including at least a feature field in each data record;  
supplying each feature field with data representative of one or more features associated with each data record,  
wherein the feature field of the data record having the requested data is compared with at least a portion of the feature mask to determine whether the requested data is  
10 compatible with the end-user system.

37. A computer system, comprising:  
a processor;  
memory in operable communication with the processor; and  
15 a database stored in the memory, the database compatible with multiple end-user systems and including:  
a data section that includes a plurality of data records, and  
a structure section that includes a feature mask, the feature mask including data that indicates whether a particular one of the data records is  
20 compatible with one or more of the end-user systems.

38. The system of Claim 37, wherein:  
each data record has one or more features associated therewith; and

the feature mask data indicates whether each feature of a data record is compatible with one or more of the end-user systems.

39. The system of Claim 37, wherein:

5 each data record includes at least a feature field containing one or more feature bits that represent each of the features associated therewith; and

the feature mask includes one or more feature mask records, each feature mask record including at least one or more compatibility fields each containing one or more bits that indicate whether a particular one of the data records is compatible with one or  
10 more of the end-user systems.

40. The system of Claim 37, wherein:

the data section comprises a plurality of data tables, each data table including a plurality of the data records; and

15 the structure section comprises a plurality of features masks, each feature mask at least associated with one of the data tables and including data that indicates whether a particular one of the data records in an associated data table is compatible with one or more of the end-user systems.

20 41. The system of Claim 40, wherein:

each data record in each data table includes at least a feature field containing one or more feature bits that represent each of the features associated therewith; and

each feature mask includes a plurality of feature mask records, each feature mask record including at least one or more compatibility fields each containing one or more bits that indicate whether a particular one of the data records in the associated data table is compatible with one or more of the end-user systems.

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42. The system of Claim 37, wherein the structure section further comprises a system identification table that includes data that uniquely identifies each of the end-user systems.

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43. The system of Claim 42, wherein the system identification table comprises a plurality of system identification records, each system identification record associated with each of the end-user systems.

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44. The system of Claim 37, wherein:  
the data section comprises a plurality of data tables, each data table including a plurality of the data records; and  
the structure section further comprises a table pointer table that includes data that uniquely describes at least each of the data tables.

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45. The system of Claim 44, wherein:  
the table pointer table comprises a plurality of table pointer records; and  
at least one table pointer record is associated with each of the data tables.



46. The system of Claim 45, wherein each table pointer record includes data representative of at least:

- a location of the associated data table;
- a number of the data records in the associated table; and
- 5 a size of each data record in the associated data table.

47. The database of Claim 37, wherein:

each data record includes one or more fields; and

10 the structure section further comprises a field definition table that includes at least data representative of each of the data record fields.

48. The system of Claim 47, wherein the structure section further comprises one or more return type tables, each return type table including data representative of a format of each of the data record fields.

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49. A flight management system, comprising:

memory;

a navigation database stored in the memory, the navigation database compatible with multiple flight management systems and including:

- 20 a data section that includes a plurality of navigational data records, and
- a structure section that includes a feature mask, the feature mask including data that indicates whether a particular one of the navigational data records is compatible with one or more of the flight management systems; and

a processor configured to generate an aircraft flight plan based at least in part on the navigational data stored in the navigation database.

## XI. EVIDENCE APPENDIX

No evidence pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 has been entered by the Examiner or relied upon by Appellant in the instant appeal beyond that which is  
5 already contained in the as-filed application, as is delineated in the Arguments section of this Brief.

## XII. RELATED PROCEEDINGS APPENDIX

As there are no related appeals and interferences, there are also no decisions rendered by a court or the Board of Patent Appeals and Interferences that are related to  
5 the instant appeal.